

Daily Space Weather Summary (SUPARCO)

Thursday, October 15, 2020, 14:18 PST



LOCAL CURRENT IONOSPHERIC CONDITIONS OVER PAKISTAN ^a

Critical Frequency of F2 layer (foF2)	6.5 MHz							
Virtual Height of F2 layer (h`F2)	260 km							
Total Electron Content (TEC)	10 TECU							
Maximum Usable Frequency (MUF) and Optimum Traffic Frequency (FOT) for various distances								
Distance (Km)	100	200	400	600	800	1000	1500	3000
MUF (MHz)	6.6	7.0	8.2	9.8	11.5	13.3	17.3	23.1
FOT (MHz)	5.6	5.9	6.9	8.3	9.8	11.3	14.7	19.6

Local ionospheric conditions are nominal with slightly depressed MUF conditions.

LOCAL GEOMAGNETIC CONDITIONS OVER PAKISTAN ^{ab}

K-index	1(max K in 24 hrs: 1)	
Total Field Value (F)	45446/49983 nT	
Declination (D)	0.96/1.80 degrees	

The local geomagnetic field is quiet at the moment.

LATEST SOLAR CONDITIONS

Sunspot Number (SN)	12
Solar radio flux (F10.7)	75 sfu
Solar wind speed	269 km/sec (varied in the past 24 hrs between 264 & 304 km/s)
Solar x-ray flares	A 6.2 (max flare in the past 24 hrs: B 1.0 1354 UT Oct 14)
Interplanetary Magnetic Field (IMF) Total Field (Bt) Z Component of Field (Bz)	2.6 nT (varied in the past 24 hrs between 1.6 nT & 7.3 nT) -0.5 nT (varied in the past 24 hrs between -0.7 nT & +3.7 nT)

Solar conditions are at very low levels with background X-ray flux at A-class level. Local HF working frequencies are slightly depressed as compared to monthly average predicted values.

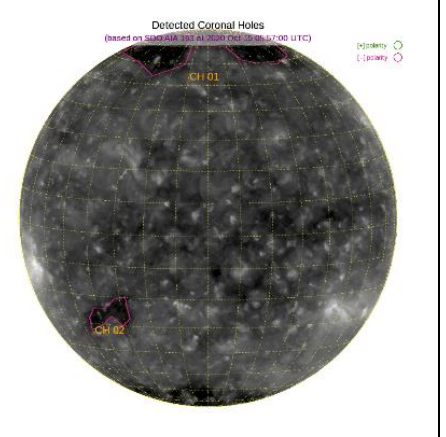
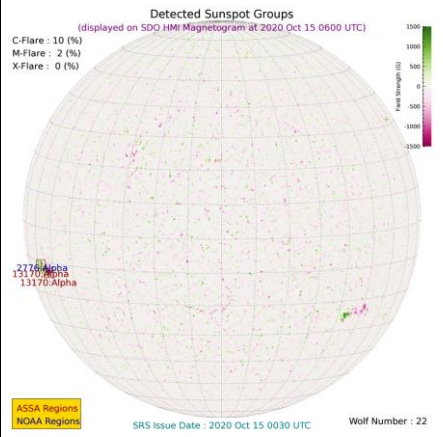
^aSonmiani (SON): 25.2° N, 66.75 E° ^bIslamabad (ISB): 33.7° N, 73.13 E°

Notes: Credits: www.spaceweather.go.kr, www.sws.bom.gov.au, www.spaceweather.com, www.solarmonitor.org

Daily Sun: 15 October 2020

There are no active regions on the solar disk currently.

02 Coronal Holes (CHs) are detected on the solar disk.



DISCUSSION:

Solar activity is at very low levels. The solar wind speed is expected to remain near its nominal level. Geomagnetic conditions are expected to at quiet levels. Local HF conditions are mildly depressed.